

AMENDMENTS TO THE CLAIMS:

Claim 1 (currently amended) An antagonist that inhibits angiogenesis by modifying protein-protein interactions, wherein the protein-protein interactions comprise interactions between at least one amino acid sequence within a first protein and at least one amino acid within a second protein, wherein the first protein is a proteolytic enzyme and the second protein is an integrin.

Claim 2 (original) The antagonist of claim 1 wherein the first protein is MMP-9.

Claim 3 (currently amended) The antagonist of claim 1 wherein the ~~first~~ second protein is a β 1-containing integrin.

Claim 4 (original) The antagonist of claim 1 wherein the first protein is MMP-9 and the second protein is a β 1-containing integrin.

Claim 5 (original) The antagonist of claim 4 wherein the protein-protein interactions cause MMP-9 to bind to the β 1-containing integrin.

Claim 6 (original) The antagonist of claim 3 wherein the β 1-containing integrin is α 5 β 1 integrin.

Claim 7 (original) The antagonist of claim 4 wherein the β 1-containing integrin is α 5 β 1 integrin.

Claim 8 (original) The antagonist of claim 1 wherein the protein-protein interactions cause co-localization of the first protein and the second protein on a cell surface or a blood vessel.

Claim 9 (original) The antagonist of claim 1 wherein said antagonist inhibits angiogenesis.

Claim 10 (original) The antagonist of claim 1 wherein said antagonist inhibits tumor growth.

Claim 11 (original) The antagonist of claim 1 wherein said antagonist inhibits metastasis.

Claim 12 (original) The antagonist of claim 1 wherein said antagonist inhibits a disease state.

Claim 13 (original) The antagonist of claim 12 wherein the disease is psoriasis, macular degeneration, a neurological disease, or restenosis in a tissue.

Claim 14 (original) The antagonist of claim 1 wherein said antagonist is a monoclonal antibody.

Claim 15 (original) The antagonist of claim 14 wherein said monoclonal antibody is monoclonal antibody FM155.

Claim 16 (currently amended) The ~~An~~ antagonist of ~~claim 1~~ that inhibits angiogenesis by modifying protein-protein interactions, wherein the protein-protein interactions comprise interactions between at least one amino acid sequence within a first protein and at least one amino acid within a second protein, wherein said antagonist has the binding specificity for at least one target of monoclonal antibody FM155.

Claim 17 (original) The antagonist of claim 1 wherein the antagonist is a polyclonal antibody.

Claims 18-21 (withdrawn)

Claim 22 (original) The antagonist of claim 1 wherein the antagonist is a humanized or chemically modified monoclonal antibody.

Claim 23 (original) The antagonist of claim 1 wherein the antagonist is a fragment of a monoclonal antibody.

Claim 24 (original) The antagonist of claim 1 wherein the antagonist is conjugated to cytotoxic or cytostatic agents.

Claims 25-104 (withdrawn)

Claim 105 (new) The antagonist of claim 1, wherein the proteolytic enzyme is a matrix metalloproteinase (MMP).

Claim 106 (new) The antagonist of claim 105, wherein the MMP is selected from a group consisting of MMP-1, MMP-2, MMP-3, MMP-7, MMP-9, and PUMP-1.